

# MNM Fatal 2012-10

- Powered Haulage Accident
- July 26, 2012 (Montana)
- Crushed Stone Operation
- Equipment Operator
- 49 years old
- 18 weeks of experience

# Overview

The accident occurred because management previously directed the electrical panel for the conveyor to be modified, allowing the stacker conveyor's start/stop switches to be bypassed. The wiring was changed to bypass the start/stop switches on the stacker conveyor's electrical panel provided by the manufacturer.

At the end of each day and in preparation for the next day, the disconnect switch on the electrical panel located on the side of the stacker was placed in the "on" position so a person could remotely control the stacker conveyor from inside a control van, located approximately 230 feet away. This condition contributed to the stacker conveyor starting by a means other than recommended by the manufacturer.

Additionally, the victim was greasing the head pulley on the stacker conveyor and it was not deenergized, locked and tagged out, and blocked against motion. The audible warning device was not sounded, as required, to warn the victim who was working on the stacker conveyor that the conveyor was going to start.



# Root Causes

*Root Cause:* Management directed the wiring to be modified to bypass the start and stop switches on the stacker conveyor's electrical panel that was provided by the manufacturer.

*Corrective Action:* The wiring was returned to a manufacturer approved design.

*Root Cause:* Management did not ensure that safe operating procedures were followed while persons greased the head pulley of the stacking belt conveyor. The victim accessed the stacker conveyor without ensuring that it had been deenergized, locked and tagged out, and blocked against hazardous motion.

*Corrective Action:* Management established policies, procedures, and controls to ensure that belt conveyors are deenergized, locked and tagged out, and blocked against hazardous motion before persons work on them. Management also installed grease lines that can be reached from the ground. A man lift has also been provided to provide safe access. All miners have been trained regarding these new procedures.

*Root Cause:* Management did not ensure that safe operating procedures were followed prior to starting the stacker conveyor. The required audible warning device was not sounded at the location of the accident when the stacker conveyor was started.

*Corrective Action:* A standard operating procedure for sounding the horn before starting the equipment was implemented and all miners were trained accordingly.

# Best Practices

- Provide and maintain a safe means of access to all working places.
- Establish policies and procedures for conducting specific tasks on belt conveyors.
- Ensure that persons are task trained and understand the hazards associated with the work being performed.
- Deenergize and Lock-out/tag-out all power sources before working on belt conveyors.
- Block belt conveyors against motion before working near a drive, head, tail, and take-up pulleys.
- Maintain communications with all persons performing the task. Before starting belt conveyors, ensure that all persons are clear.
- Sound an audible alarm prior to start up, if the entire length of the belt conveyor is not visible from the starting switch.
- Clearly label all switches on equipment and provide training to persons who operate and work in the vicinity of equipment.